

What is claimed is:

- 1 1. An optoelectronic package comprising:
2 an insulating base having an upper surface;
3 an optoelectronic device mounted on the upper surface of the insulating base;
4 a metal layer attached to the upper surface of the insulating base; and
5 a metal cap having a rim located at a bottom portion thereof, wherein the metal
6 cap encloses the optoelectronic device and the rim of the metal cap is adapted to attach to
7 the metal layer to hermetically seal the metal cap to the insulating base.

- 1 2. The optoelectronic package of claim 1, wherein the insulating base has an
2 external surface on the outside of the optoelectronic package.

- 1 3. The optoelectronic package of claim 2, further comprising:
2 a plurality of vias running from an exterior of the optoelectronic package through
3 the insulating base into an interior of the optoelectronic package.

- 1 4. The optoelectronic package of claim 3, wherein the plurality of vias are
2 electrically coupled to the optoelectronic device.

- 1 5. The optoelectronic package of claim 3, wherein the plurality of vias are held in
2 place by solder.

- 1 6. The optoelectronic package of claim 2, wherein the optoelectronic device is
2 mounted on a submount that is mounted on the upper surface of the insulating base.

1 7. The optoelectronic package of claim 2, wherein the metal layer extends at least
2 partially past a top surface perimeter of the insulating base to expose a bottom surface of
3 the metal layer.

1 8. The optoelectronic package of claim 7, wherein the metal layer extends at least
2 partially around a side surface of the insulating base to expose a bottom surface of the
3 metal layer.

1 9. The optoelectronic package of claim 7, wherein the metal layer extends at least
2 partially around a first side surface of the insulating base to expose a first bottom surface
3 of the metal layer and extends at least partially around a second side surface of the
4 insulating base to expose a second bottom surface of the metal layer, wherein the first
5 side surface is opposite the second side surface.

1 10. The optoelectronic package of claim 2, wherein the optoelectronic device is an
2 optical transmitter and/or optical receiver.

1 11. The optoelectronic package of claim 2, wherein the metal layer comprises a
2 metallization layer at least partially covering a top surface of the insulating base.

1 12. The optoelectronic package of claim 11, wherein the metal layer further
2 comprises a metal sealing member coupled to the metallization layer.

1 13. A TO can comprising:
2 an insulating base having an upper surface;
3 an optoelectronic device mounted on the upper surface of the insulating base;

4 a metal layer attached to the upper surface of the insulating base; and
5 a metal cap having a rim located at a bottom portion thereof, wherein the metal
6 cap at least partially encloses the optoelectronic device and the rim of the metal cap is
7 adapted to attach to the metal layer to hermetically seal the metal cap to the insulating
8 base.

1 14. The TO can of claim 13, wherein the insulating base has at least one flat side
2 wall.

1 15. The TO can of claim 13, further comprising:
2 a plurality of vias running from an exterior of the TO can through the insulating
3 base into an interior of the TO can.

1 16. The TO can of claim 15, wherein the plurality of leads are electrically coupled to
2 the optoelectronic device.

1 17. The TO can of claim 15, wherein the insulating base comprises ceramic.

1 18. The TO can of claim 17, wherein the insulating base comprises one of alumina,
2 beryllium oxide and aluminum nitride.

1 19. The TO can of claim 13, wherein the metal layer comprises a metal sealing
2 member.

1 20. The TO can of claim 13, wherein the metal layer comprises a solder preform.